

A New Panamic *Mitrella*

(Mollusca : Gastropoda)

BY

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(1 Plate)

ON ONE LOW TIDE series, from January 27, to February 2, 1975, William and Lois Pitt sampled the intertidal molluscan fauna in the vicinity of Puntarenas, Puntarenas Province, Costa Rica. On January 29 and 30, 1975, they sampled the fauna at Punta Coralillo, Bahía de Caldera. The substrate was rocky rubble above, and muddy sand below the mean low tide line. Prominent members of the molluscan fauna included *Fissurella (Cremides) virescens* Sowerby, 1835; *Scurria mesoleuca* (Menke, 1851); *Tegula (Agathistoma) verrucosa* McLean, 1970; *Thais (Vasula) melones* (Duclos, 1832); *Acanthina brevidentata* (Wood, 1828); *Cantharus (Gemophos) gemmatus* (Reeve, 1846); and *Anachis (Costoanachis) fluctuata* (Sowerby, 1832). Also occurring in abundance was a new species of *Mitrella* that is described herein. The animals were found aggregated on the undersides of rocks near the mean low tide line. A deep water port is under construction adjacent to the type locality. There will be a breakwater about 2 km to the north, angling from the shore of Bahía de Caldera in a northwesterly direction. Although the type locality will not be within the completed harbor, some alteration of local conditions due to construction could be expected.

Museums mentioned in the text are the following: AMNH, American Museum of Natural History, New York; BMNH, British Museum (Natural History), London; CAS, California Academy of Sciences, San Francisco; UCR, University of Costa Rica; FMNH, Field Museum of Natural History, Chicago; MCZ, Museum of Comparative Zoology, Harvard University, Cambridge, Mass.;

HSU, Humboldt State University, Arcata, California; LACM, Los Angeles County Museum of Natural History; USNM, National Museum of Natural History (Smithsonian Institution), Washington, D. C.; ANSP, Academy of Natural Sciences, Philadelphia; SDMNH, San Diego Museum of Natural History; TU, Tulane University. The following private collections are also cited: Sally Bennett Collection, Phoenix, Arizona; Helen DuShane Collection, Whittier, California; William Pitt Collection, Sacramento, California; Tom Rice Collection, Port Gamble, Washington; Donald Shasky Collection, Redlands, California; and Carol Skoglund Collection, Phoenix, Arizona.

## BUCCINACEA

## COLUMBELLIDAE

*Mitrella* Risso, 1826*Mitrella loisae* Pitt & Kohl, spec. nov.

(Figures 2a, 2b, 3a, 3b)

**Diagnosis:** A small, smooth *Mitrella* differing from other Panamic members of the genus in having a unique color pattern of irregular dots and wavy lines.

**Description of Holotype:** Shell small, slender, smooth, with 7 slightly convex whorls; ground color yellow; nuclear whorls 3, first 2 white, third yellow; first postnuclear whorl with faint brown wavy lines; second whorl with white band below suture, interrupted by wavy lines that merge into irregular dots; third whorl with narrow band of irregular brown dots below suture, followed by white

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band which is interrupted by wavy brown lines that merge into irregular dots; body whorl with narrow band of irregular dots below suture, followed by a white band which is interrupted by wavy brown lines which in turn merge into a series of irregular dots and wavy lines, all elongated in direction of growth; outer lip thickened, denticulate within; inner lip smooth except for 2 low folds; base of columella with about 10 spiral lirations. Height 5.3 mm, diameter 2.2 mm.

**Type Locality:** North side of Punta Coralillo, Bahía de Caldera, Puntarenas Province, Costa Rica ( $9^{\circ}54'N$ ;  $84^{\circ}44'W$ ) (Figure 1), about 20 km S of the city of Puntarenas. There were 575 specimens collected by William and Lois Pitt on January 29-30, 1975.

**Type Material:** Holotype, CAS 60193. Paratypes (6) each to the following: CAS 60194-60199, AMNH, BMNH, UCR, FMNH, MCZ, HSU, LACM, USNM, ANSP, SDMNH, TU, DuShane Collection, Pitt Collection, and Skoglund Collection. The remaining specimens from the original lot are in the Pitt Collection. Variation among specimens in the original lot is from 4.4 to 5.2 mm in height. Some of the paratypes are juveniles as evidenced by the thin, non-denticulate outer lip.

**Referred Material:** 1) Playa Jaco, Puntarenas Province, Costa Rica ( $9^{\circ}36'N$ ,  $84^{\circ}38'W$ ) (Bennett and Rice Collections, 1 specimen each, collected by Sally Bennett and Tom Rice on 25 April 1975); 2) El Rubio and Punta Mero, Tumbes Province, Peru ( $3^{\circ}54'S$ ,  $80^{\circ}53'W$ ) (Shasky Collection, 21 specimens; SDMNH, 43 specimens; LACM, 39 specimens, collected by Donald Shasky, James H. McLean and Mario Peña on 16 April 1972); 3) south of Bocapan, Tumbes Province, Peru ( $3^{\circ}44'S$ ,  $80^{\circ}46'W$ ) (SDMNH, 2 specimens; LACM 5 specimens, collected by Donald Shasky, James H. McLean, and Mario Peña on 12 April 1972); 4) Playas (reef at west end of beach), south side of Santa Elena Peninsula, Ecuador ( $2^{\circ}38'S$ ,  $80^{\circ}25'W$ ) (Shasky Collection, 3 specimens; LACM, 2 specimens, collected by Donald Shasky and James H. McLean on 8 March 1970); 5) Cape San Francisco, Ecuador (approx.  $0^{\circ}37'N$ ,  $80^{\circ}10'W$ ) (LACM 1 specimen, collected on 23 February 1938, Hancock, bottom sample No. 586).

**Discussion:** *Mitrella loisae* is similar to *M. pulchrior* (C. B. Adams, 1852), but is more slender and differs in

color pattern in the following ways: *M. pulchrior* has rectangular white spots below the suture, separated by vertical dark blotches; whereas *M. loisae* has a white band below the suture, interrupted by wavy brown lines elongated in the direction of growth; *M. pulchrior* has clear-cut, fine dots on the body whorl; whereas dots on the body whorl of *M. loisae* are irregular in shape and in many cases merge into wavy lines. Other Panamic *Mitrella* treated in KEEN (1971) were not considered close enough to require comparison.

A southern form of *Mitrella loisae* from the above mentioned locations in Ecuador and Peru differs in having a paler ground color, and the wavy lines on the lower part of the body whorl tend to break into wavy dotted lines.

It is noteworthy that although extensive collecting has been done in Panama, there were no specimens of *Mitrella loisae* from that area in any of the major collections that we checked.

*Mitrella pulchrior* has been reported only from Panama (KEEN, 1971: 593). However, material that we have examined extends its range north to Matanchen, Nayarit, Mexico (CAS, collected by Faye Howard; LACM, collected by Gale Sphon), and south to Playas, Santa Elena Peninsula, Ecuador (Shasky Collection; LACM, collected by Donald Shasky, James H. McLean, and Mario Peña).

**Etymology:** The specific name honors the wife of the senior author who has given continual encouragement and been of much assistance in the field.

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## Literature Cited

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1971. Sea Shells of Tropical West America; marine mollusks from Baja California to Peru. 2nd ed. Stanford Univ. Press, Stanford, Calif. i-xiv + 1064 pp.; ca. 4000 figs.; 22 color pls. (1 September 1971)

## Explanation of Figures 1 to 3

Figure 1: Aerial view of Punta Coralillo from 5 000 m; arrow indicates the type locality of *Mitrella loisae*

Figure 2a: Ventral view of holotype of *Mitrella loisae*;

Figure 2b: Dorsal view of the holotype; height 5.3 mm

Figure 3a: *Mitrella loisae*, southern form, from El Rubio, and Punta Mero, Tumbes Prov., Peru; ventral view, height 5 mm (CAS)

Figure 3b: Dorsal view of the same specimen